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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,789	02/08/2002	R. Scott Forrest	38190.244112	2807

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EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,789

Applicant(s)

FORREST ET AL.

Examiner

George P. Wyszomierski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-16 and 32-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 and 39-44 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7, 32, 33, 36 and 37 is/are rejected.
- 7) ☒ Claim(s) 2, 8, 16, 34, 35 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050307.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The finality of the Office Action mailed March 7, 2005 is withdrawn. A new Office Action follows. The amendment filed May 6, 2005 has been entered.

2. Claim 16 is objected to for the following reason: the examiner questions whether this claim should depend from claim 9, rather than claim 1 as presently drafted. In its present form, the claim lacks antecedent basis for a "structural assembly as defined in claim 1".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32, 33 and 36 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Hungerford (U.S. Patent 2,284,824).

Hungerford discloses a nut having a first region including a threaded opening and a second region 12 having a more refined grain structure and which at least partially

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encompasses the first region. The prior art nut is made of an aluminum or magnesium alloy (Hungerford page 1, line 33). The overall shape of the prior art structure can be defined as tubular, in accordance with instant claim 36. Hungerford states that the prior art nuts have increased strength and ductility.

Hungerford makes no specific statement regarding toughness or fatigue resistance of the prior art products. The examiner's position is that:

a) The Hungerford products are made of substantially same material in the same physical configuration and metallurgical structure as those claimed, and therefore the properties such as toughness and fatigue resistance of the prior art products would likewise be identical to those of the claimed products (in the sense of 35 USC 102), or

b) Properties such as toughness and fatigue resistance are clearly desirable in nuts. Therefore, at a minimum, one of ordinary skill in the art would have been motivated to make the nuts of Hungerford in a manner which results in improved toughness and fatigue resistance.

5. Claims 1, 3, 7, 32, 33, 36 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 11-051103.

The JP '103 reference discloses a generally tubular shaped member made of aluminum alloy and including a plurality of surface regions, including a number of such regions having minute metallographic structure as a result of being treated by a rotating probe at least partially inserted into the surface of the member. The refined regions are spaced apart and generally parallel; see figure 1 of JP '103.

The '103 Abstract makes no specific statement regarding strength, toughness or fatigue resistance of the prior art products. The examiner's position is that:

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a) The JP '103 products are made of substantially same material in the same physical configuration and metallurgical structure as those claimed, and therefore the properties such as strength, toughness and fatigue resistance of the prior art products would likewise be identical to those of the claimed products (in the sense of 35 USC 102), or

b) Properties such as strength, toughness and fatigue resistance are clearly desirable in the absorption impact members disclosed in JP '103. Therefore, at a minimum, one of ordinary skill in the art would have been motivated to make the articles of JP '103 in a manner which results in the presently claimed improved properties.


6. Claims 2, 8, 34, 35 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 9-16 and 39-44 are allowable over the prior art of record (subject to correction of the objection to claim 16 noted supra).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GPW
May 17, 2005


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1742